CHAPTER 1 SEARCHING FOR SUSTAINED PERFORMANCE

The world breaks everyone...those that will not break, it kills. It kills the very good and the very gentle and the very brave impartially. If you are none of these, you can be sure it will kill you too but there will be no special hurry.

-ERNEST HEMINGWAY

The business environment is a merciless place. Before Microsoft, Apple, or Google, there was the Digital Equipment Corporation (DEC). Ken Olsen and Harlan Anderson incorporated DEC in Maynard, Massachusetts, in 1957, the same year that Hewlett-Packard went public. The investment community was so hostile toward computers that Georges Doriot, whose American Research and Development Corporation provided seed capital, suggested they change the originally proposed company name, "Digital Computer Corporation."

DEC created the minicomputer with its PDP (Programmable Data Processor) family of machines. These interactive computers became mainstays of research departments, engineering laboratories, and academic institutions. Because it sold through original equipment manufacturers (OEMs) as well as directly, DEC was not burdened with costly application software development and peripheral configuration. In 1970, the PDP-11, DEC's first 16-bit computer, firmly established itself as the market leader. Ironically, it was a crash program in response to Data General's NOVA machine, which had been developed by an engineering team of DEC defectors in 1968. Ultimately, over six hundred thousand PDP-11s of all models were sold. Most, if not all, of the computer engineers who created the PC revolution learned to program on PDP-11s.

In 1978, DEC introduced the 32-bit VAX (Virtual Address eXtension) computer, arguably the most successful minicomputer ever made. By 1990, VAX had propelled DEC to the number two position in the computer industry, behind IBM. That year, its peak, DEC had revenue of \$14 billion and employed 120,000 people worldwide.

Eight years later, the Digital Equipment Corporation was gone, acquired by PC maker Compaq at a "discounted" price. In 1977, Ken Olsen had famously derided the emerging personal computer, saying, "There is no reason for any individual to have a computer in his home." Unfortunately for Olsen, it was the dream of Apple cofounder Steve Wozniak to have a PDP-11 in his home. Digital was late with personal computers, introducing three product lines that were incompatible with each other and with emerging industry standards. They stuck with proprietary architectures and operating systems while the industry moved toward standardization and interoperability. They were slow to adopt UNIX and provide customers with access to its extensive suite of application software.

DEC's product group organization structure went from strength to liability as competition among different subgroups squandered resources and missed market opportunities. Olsen reorganized DEC three times between 1988 and 1991 in increasingly desperate attempts to regain focus and competitiveness. The result was confusion and defection; some of the best and brightest at DEC are now elsewhere, running major technology organizations.

After posting eleven straight profitable years between 1980 and 1990, DEC lost money in five of its last seven years, and Olsen was removed by the board in 1995. When it was acquired by Compaq in 1998, DEC employed 53,500 people, half of its 1990 peak. Four years later, Compaq was acquired by Hewlett-Packard.

SURVIVING VERSUS THRIVING

Digital's spectacular rise and fall over a forty-year arc is unusual in the business world. We tend to think of corporations as long-lived entities that span many human generations. Companies such as Ford Motor, Harley-Davidson, DuPont, Siemens, or General Electric have celebrated over a century of existence. But while the experience of these companies is not unique, they are the exceptions, not the rule. Most start-up companies—in fact, most organizations—do not last very long. Recent research suggests that the expected life of a new American company is on the order of six years.¹ DEC lasted forty years, although the company that bought it, Compaq, had a total life span of only twenty years. Corporate life, like human life, can be nasty, brutish, and short. As Exhibit 1.1 shows, over the past forty years, about half of the U.S. Fortune 500 fell off the list each decade as companies dissolved, were acquired, or underwent a change of control and ceased to exist as independent going concerns.



EXHIBIT 1.1. Survival Rates of Fortune 500 Firms

The Old Way of Defining Sustained Performance

Survival is hard enough, but most people—investors and managers in particular—are interested in financial performance. The goal of "maximizing shareholder returns" is usually held up as the primary objective of management. Total shareholder return (TSR) is the preferred performance metric and, in the United States, the S&P 500 stock index is the appropriate benchmark for "the market" (see "Shareholder Returns" sidebar). These financial market measures are "objective," are difficult to manipulate over anything but the very short term, reflect outside investors' perceptions of value, and have the benefit of being a single measure against which *any* public firm can be judged.

The data suggest that maximizing shareholder value over the long run is as hard as surviving. No company, for example, has consistently beaten "the market." As Foster and Kaplan wrote in 2001: ...long-term studies of corporate birth, survival, and death in America clearly show that the corporate equivalent of El Dorado, the golden company that continually performs better than the markets, *has never existed*. It is a myth. Managing for survival, even among the best and most revered corporations, does not guarantee strong long-term performance for shareholders. In fact, just the opposite is true. In the long run, markets always win.²

Equity markets are subject to fads, irrational exuberance, and panics that have little to do with the quality of the business strategy, management insight, and organization designs that produce profits. Although all industries are subject to the effects of recession, inflation, and social change, the relative performance of industries changes according to their own events and cycles, causing even industry darlings to revert to market means. As a result, stock price and the resultant calculation of shareholder return are inadequate measures of both management effectiveness and sustained performance.³

SHAREHOLDER RETURNS

Finance theory holds that stock prices represent the market's rational expectations for future performance, and shareholder returns are a popular metric for determining absolute or relative performance for publicly traded companies. The rate of total shareholder returns (TSR) for any given time period is calculated as:

 $TSR = ((P_{E} - P_{B} + D)/P_{B}) - 1$

Where:

 P_E is the price per share at the end of the period;

 $P_{\scriptscriptstyle B}$ is the price per share at the beginning of the period; and

D is dividends per share paid in the period.

For example, Exhibit 1.2 shows monthly TSR, in percent, for ExxonMobil from May 1997 to June 2002. These returns swing from a high of 17.7 percent to a low of -8.6 percent.

Plotting cumulative TSR provides a way to "see" what is happening to the value of an investment over time. By convention, the plot starts with a value of 1, as in \$1 worth of ExxonMobil, and compounds intraperiod returns to create a graphical view of investment growth or decline. Cumulative TSR (CTSR) is given by the formula:

 $\mathsf{CTSR}_t = \mathsf{CTSR}_{t-1} * (1 + \mathsf{TSR}_t)$



Where:

 $CTSR_t$ is the cumulative TSR in time period t;

 \mbox{CTSR}_{t-1} is the cumulative TSR in time period t-1 (the prior period); and

 TSR_t is the total shareholder return in time period t (as calculated above). The monthly cumulative TSR for ExxonMobil from May 1997 to June 2002 is shown in Exhibit 1.3.

At the end of our example five-year period, in June 2002, the index value is 1.48. That is, the value of our \$1 investment in Exxon has grown to \$1.48 of ExxonMobil, with a lot of ups and downs in between. Notice that if we calculated the simple TSR from May 16, 1997, to June 2, 2002, it would be the same 48 percent. Given the volatility of share prices and shareholder returns, TSR and CTSR are very sensitive to start dates and end dates.

The reason for starting on May 16, 1997, is that was the date of Amazon's initial public offering. The cumulative TSR for Amazon stock is shown in Exhibit 1.4.

Amazon took shareholders on a wild ride, to a high of fifty-seven times their initial investment in February 1999 before settling at a little over ten times in June 2002. The TSR for Amazon between May 1997 and

(Continued)





June 2002 was 1,023 pecent, but that calculation would not reveal what happened between those dates.

A comparison of cumulative TSRs was used in *Good to Great* and *What Really Works* to distinguish "high performing" companies from the rest.⁴ Exhibit 1.5 compares cumulative TSR for Amazon, ExxonMobil, and Microsoft from May 1997 to June 2002.

As can be seen, ExxonMobil and Microsoft barely register when compared to Amazon. So which is the high performing company? That depends entirely on your perspective. Is performance absolute or relative? Is it a function of stock price or economic value (that is, profit) created?

Over this period, ExxonMobil had annual ROAs of between 5.5 percent and 11.9 percent, and beat its average industry ROA every year. Amazon did not report its first quarterly profit until January 2002. Amazon's share price benefited from the dot-com bubble, during which investors were assured that the economic logic of profitability no longer applied. Exxon's share price reflected a depressed industry that led to a new round of consolidation, during which Exxon acquired Mobil. While you might have preferred to own Amazon stock over this period, ExxonMobil was the clear outperformer in terms of economic value delivered. A valid alternative to shareholder returns as a measure of comparative performance is accounting profitability, calculated as return on assets or return on equity. Managers, as opposed to shareholders, invest in their businesses and look to survive, compete, and grow *within their industry*. The robust business of industry benchmarking and best practices attests to managers' desire to know how they are doing relative to peers as well as what peers are doing differently to deliver superior or inferior returns. What matters is relative performance in their own environment. The jaguar does not care what happens on the African savannah but is very concerned with what happens in the Brazilian rain forests.

Anita McGahan, in an important and often overlooked series of articles, mined Compustat's "business segment" (operating units or divisions of corporations) database for the period 1981–1997 looking for patterns of performance to help guide expectations for managers and researchers.⁵ She screened 13,574 reporting entities—groups of similar operating units or business segments—with annual sales or assets of at least \$10 million within 8,018 U.S. corporations in 664 industries. The study ranked business segments according to accounting profitability (the ratio of operating income to assignable assets, or ROA) in the first four years the segment appeared (but mostly 1981–1984, as most firms were present for the entire period) and the last four years the segment appeared (but mostly between 1993–1997). McGahan defined sustained high performance as being in the top quartile of profitability in the first four years and the last four years of the time series. Her results are shown in Exhibit 1.6.

		Top Quartile	Middle	Bottom Quartile			
Initial Performance Position	Top Quartile	Sustained High Performance (19.4%)		Declining Performers (9.8%)			
	Middle	Rising Performers (10.5%)	Steady Moderate Performance (40.7%)				
	Bottom Quartile			Chronic Underperformance (19.6%)			

Final Performance Position

EXHIBIT 1.6. McGahan's Performance Data

Source: Adapted from McGahan, 1999, Figure 4.

What surprised McGahan, and us too, was the persistence of the relative rankings. Looking at the diagonal cells from upper left to lower right, we see that 79.7 percent of the firms that began the period as a top, medium, or bottom performer ended the period in the same category. Only 10.5 percent of the firms (the lower-left three cells) were able to move up in performance, and of those only 0.5 percent were able to make the jump (over a sixteen-year period) from bottom to top. When the measure of performance was profitability and the benchmark was an arbitrary but reasonable 25th percentile of performance.

Despite these real insights, McGahan's conclusions are vulnerable to several challenges. First, looking at only the first four and last four years of a period ignores the time in between (almost ten years) in which important events may have affected the pattern of performance. Performance could have varied up or down within those four-year periods as well as in the interim. A firm that is a high performer at the beginning and end but performs poorly in between does not deserve to be called a sustained high performer. Such a pattern suggests a very different performance dynamic. Second, McGahan's definition of "industry" used the old Standard Industrial Classification (SIC) system. As a result, some categories, as she noted, lumped very different businesses together (for example, pharmaceutical companies and agricultural firms). Explaining performance variation with such a broad definition of industry may be washing out some pure industry effects.

These concerns prompted us to ask three additional questions:

- What happens if you look at a more continuous picture of performance over a longer time period?
- What does this picture look like using a finer-grained view of industry (read "environment")?
- What are the implications for CEOs and their top management teams?

A Different Way of Defining Sustained Performance

To answer the first two questions, we went back to the Compustat database and analyzed annual ROA (annual net income/total assets) and annual TSR (annual share price returns adjusted for dividends and stock splits) data from 1980 to 2012—about twice as long as McGahan's time frame and inclusive of the Great Recession of 2008–2009. Instead of the segment database McGahan examined, we used the annual database to get a more continuous view of the performance for whole organizations, although we deliberately excluded diversified firms such as General Electric, Ingersoll-Rand, Emerson, Eaton, Berkshire Hathaway, and United Technologies. We used three benchmarks: the annual S&P 500 stock index rate of return, annual industry mean TSR, and annual industry mean ROA for the firms in our sample. We were guided by the ICB classification for industry rather than SIC or NAICS. The ICB system often breaks up a North American Industry Classification System (NAICS) category into competitive peer groups with more "face validity" and provides a better proxy for environment. Our data set comprised 424 companies in 22 industries.⁶

We defined "sustained organization performance" from a management perspective: winning in a particular environment. Specifically, if an organization posted annual ROA or TSR above a particular benchmark at least 80 percent of the time (26.5 out of 32 years), it demonstrated sustained performance.

As expected, when the measure was TSR, only one firm was able to beat "the market" more than 80 percent of the time (Holiday Corporation, in eight out of ten years for which data were available). Out of the 424 firms in our sample, only thirty were able to beat the 70-percent mark. Even fewer firms—as in none—were able to beat the 80-percent standard when the benchmark was industry average shareholder return (only eight firms beat the industry average TSR more than 70 percent of the time). Apparently, it's even harder to beat your peers than it is to beat the market!

When the benchmark measure of performance was average industry ROA, we anticipated finding patterns similar to McGahan's (and we did), but we were surprised by their nature and persistence. In every industry we analyzed over this thirty-two-year period, we observed three patterns of performance:

- Firms that outperformed the industry mean ROA at least 80 percent of the time (18 percent of the sample)
- Firms that underperformed the industry mean at least 80 percent of the time (13 percent of the sample)
- Firms that "thrashed" between periods of underperformance and outperformance relative to the industry mean (68 percent of the sample)

Unlike shareholder returns against the market, relative performance against industry profitability can be long-lived. As with McGahan's results, outperformers tend to remain outperformers and underperformers remain underperformers. However, unlike McGahan's "steady moderate" group, the middle 50 percent of her distribution, our "thrashers" label is more descriptive of the performance pattern. Thrashers remained thrashers, suggesting considerable inconsistency rather than mere mediocrity. Also in line with McGahan's data, across all the industries we studied, we found only three firms—Harley-Davidson, IBM, and DaVita—that "broke out" of their thrasher or underperformer pattern and changed to achieve consistently high performance for the remainder of the period.

Chapter Appendix One displays these different pictures of performance for several of the industries we studied. But they all tell the same story. A managerial view of performance suggests that a few organizations can and do consistently outperform industry profitability, rather than attempting to beat a market rate of return. But more important, for a majority of firms life is a series of ups and downs, a dizzying pattern of boom and bust in which success and failure are just as easily ascribed to whoever is sitting in the captain's chair (whether or not they had anything to do with it) as to any organizational strategy or capability. Thrashers make for good stories as they cycle between damnation and redemption at the hands of scapegoat or hero CEOs.

THE AGILITY FACTOR

What accounts for sustained performance? Management and organization theory holds that successful firms have a high degree of fit or alignment with their environments. The products and services offered and the way they are delivered respond to the demands of the environment, and management has many choices as to how to make this happen. One way is to just muddle through-what researchers call "ad hoc problem solving." This form of adapting is intentional and rational, not merely reactive or passive, and does not depend on repetitive behavior.⁷ When a problem presents itself, organization members engage in a search for solutions. This behavior has been researched extensively; it was first described by the economist Herbert Simon in 1947.⁸ The research shows that since a thorough and exhaustive search under time pressure is unlikely, managers will "satisfice" rather than optimize. They will often take the first solution that appears to have any chance of solving the problem. As a result, luck is just as likely as ad hoc problem solving to explain a pattern of sustained performance. Admonishing managers to "be lucky" is neither insightful nor useful, although Napoleon had the right idea when he said, "I don't want generals who are brilliant. I want generals who are lucky."

More systematically, practitioners and researchers have developed three broad perspectives to explain how and why organizations could maintain this alignment between their organizations and the environment. These perspectives can be called the Darwinian selection argument, the organization physics argument, and the dynamic capabilities argument.

Darwinian Selection Argument

The first explanation is best framed by the population ecology school of business research.⁹ Researchers adopting this perspective have constructed and analyzed rich data sets that have led to a wealth of insight regarding a merciless Darwinian world where, industry by industry, organization change is accomplished by the birth of new organization forms and the death of old organizations that are incapable of changing.

In the standard telling of industrial evolution, large, established, inert firms are overtaken by small, upstart, nimble ones that grow to look and behave like their victims, and the cycle repeats. The forces at work are the same as those in biological ecosystems: variation, selection, and retention. This is the basic argument advanced by Clayton Christensen in *The Innovator's Dilemma*.¹⁰ DEC was unable to see the value of the emerging, disruptive PC technology and, despite great effort, was unable to adapt in time.

Sadly, this school of thought offers little solace to managers of companies that find themselves in trouble. Organization inertia—the inability to change at a rate at least equal to environmental change—is the result of commitments to courses of action that constrain responses. As organizations grow in size and the longer they live, the more inert and resistant to change they become. When the forces of "natural selection" come calling, they are so overwhelming that attempts to change a company to realign its fit with the environment have very low probabilities of success.

Turning this logic on its head, if environments are stable, inertia would be a strength; that is, an organization could sustain high levels of performance if it possessed an initial advantage at the beginning of a time period. For example, one might argue that Microsoft's admirable profitability record is a function of its early dominance in PC operating systems. Despite tremendous changes in the software industry, one thing has remained amazingly stable since Microsoft's inception: people have been buying lots of computers with Windows, and that initial advantage has paid off handsomely in profits. This might also explain Apple's current domination in mobile devices or eBay's in online auctions. Some industries have a "winner take all" dynamic that means an initial advantage and superior position can be sustained if certain core parts of the environment remain stable, particularly if network effects amplify a product's value. This argument does not, however, represent a very good general explanation for the performance patterns we see.

In particular, there is little support for the conclusion that environments are stable and organization inertia is a competitive advantage. For example, it was not obvious at the beginning that Microsoft or Apple or Amazon would win in the industry shakeout. CPM and UNIX were technically superior operating systems, Motorola and Nokia had dominant positions in mobile phones, and Peapod, J.C. Penney, and Yahoo were on the Internet well before Amazon. It is pretty hard to argue that these environments were "stable."

In fact, recent research has found that market environments have become increasingly turbulent over the past decade, and that the persistence of competitive advantage and sustained performance has gotten shorter.¹¹ "Hypercompetition," D'Aveni's term for when competitive conditions are so turbulent and uncertain that the competitive advantages and profits resulting from them cannot be sustained, has become a reality in almost every industry.¹² Over the thirty-two years covered in our database, there has been tremendous change in the political, technical, and economic landscape as well as significant increases in the breadth and depth of global competition.

In 1980, it was "morning in America," and Paul Volcker was about to unleash the first of four recessions in the period. The Soviet Union was intact, albeit on life support. China was a closed economy, India a socialist country with significant Soviet trade. Japan was ascendant, and the Asian Tigers were cubs. GM had over 40 percent of U.S. light vehicle market share. The IBM antitrust investigation had dragged on for eleven years. Utilities markets in the United States and Europe were highly regulated. The era of investor capitalism and the corporate raider was just beginning. There were no cell phones, Internet, or satellite navigation systems, and few personal computers. There was no WTO; the GATT Uruguay Round would not take place until 1986. Moreover, between 1980 and 2012, mergers, breakups, spin-offs, alliances, new entrants, and changing boundaries have altered the face of most industries.

Within-industry change has been equally mind numbing. For example, the oil and gas industry has experienced dramatic technological changes in exploration, refining, and transportation. In 1980, there were no "mini-marts" on every corner, little shale gas, no horizontal drilling, no deep-water exploration, and no 3-D seismic tools. Natural gas markets have been deregulated, federal taxes on gasoline in the United States have increased 325 percent, and environmental regulation in response to industry incidents has proliferated. Still, outperformers have adapted and maintained or enhanced their environmental fit. ExxonMobil's performance was industry leading when oil was \$8 bbl. *and* when it was \$147 bbl.

Consequently, there is no empirical support for the notion that an advantaged set of initial endowments and stable environments explain the persistence of the outperforming companies we found.

Organizational Physics Argument

The second explanation is framed by the "excellent company" research. Store shelves groan under the weight of best-selling books purporting to explain how companies can become good, excellent, great, or visionary. These "secrets of business success" may be simple or complex, but, like exercise programs or diets, they all hold out the promise of results by applying the laws of organizational physics: *Do these things, and improved performance will surely follow.* In contrast to the suggestion that organizations cannot change, the excellent company perspective says that managers have considerable sway or "strategic choice" over organizational operations and can chart strategies and courses of action to achieve high performance despite environmental change. This perspective rejects the claim that organizations cannot change; instead, it proposes that there is a "right" way to manage.

Peters and Waterman proposed one of the initial formulas for success in their classic *In Search of Excellence*, which contained much praise for Digital Equipment Corporation.¹³ They proposed eight organizational prescriptions, including a bias for action, stick to the knitting, stay close to the customer, simultaneous loose-tight properties, productivity through people, simple form and lean staff, and so on. Similarly, Jim Collins articulated a number of organizational habits to cultivate and deadly sins to avoid in *Built to Last* and *Good to Great*.¹⁴ In *Good to Great*, for example, he claimed to provide "timeless, universal answers that can be applied by any organization" (p. 5). If the organizational physics argument held, then these firms should consistently demonstrate our definition of sustained performance.

Exhibit 1.7 shows the number of years that total shareholder return has been above the S&P 500 stock index from 1980 to 2012 for the *Built to Last* and *Good to Great* companies. Even though both studies used similar techniques—cumulative shareholder returns—only Philip Morris, the tobacco company, showed up on both lists. On a year-over-year basis, seventeen out of twenty-three firms were able to beat the market more than 50 percent of the time; the two best,

Built to Last	Years of	Years/	Years/	Years/
Companies*	TSR/ROA	Percentage	Percentage	Percentage
	Data	Above S&P	Above	Above
	1980-2012	500		Average
			131	Profitability
American Express	33/33	22 (69%)	17 (53%)	19 (59%)
Boeing	33/33	22 (69%)	19 (59%)	10 (31%)
Citicorp	25/32	16 (60%)	12 (48%)	8 (25%)
Ford	33/33	14 (44%)	17 (53%)	11 (34%)
Hewlett-Packard	33/33	18 (56%)	11 (34%)	21 (66%)
IBM	33/33	15 (47%)	16 (50%)	21 (66%)
Johnson & Johnson	33/33	17 (53%)	17 (53%)	30 (94%)
Marriott	14/20	10 (71%)	5 (36%)	18 (90%)
Merck	33/33	20 (63%)	13 (41%)	25 (78%)
Motorola	33/33	16 (50%)	13 (41%)	16 (50%)
Nordstrom	33/33	20 (63%)	16 (50%)	7 (22%)
Procter & Gamble	33/33	19 (59%)	16 (50%)	13 (41%)
Sony	33/33	15 (47%)	13 (41%)	8 (25%)
Wal-Mart	33/33	19 (59%)	21 (66%)	32 (100%)
Walt Disney	33/33	20 (61%)	17 (52%)	31 (94%)
Good to Great				
Companies*				
Abbott Laboratories	33/33	18 (56%)	18 (56%)	24 (75%)
Circuit City	31/28	17 (55%)	14 (45%)	12 (43%)
Kimberly-Clark	33/33	21 (66%)	14 (44%)	11 (34%)
Kroger	33/33	20 (63%)	18 (56%)	15 (47%)
Nucor	33/33	19 (58%)	17 (52%)	32 (97%)
Pitney Bowes	33/33	15 (47%)	15 (47%)	7 (22%)
Walgreens	33/33	17 (53%)	20 (63%)	19 (59%)
Wells Fargo	33/33	19 (59%)	19 (59%)	7 (22%)

EXHIBIT 1.7. Market Performance of Good to Great and Built to Last Companies Between 1980 and 2012

* General Electric, Philip Morris, Gillette, Fannie Mae, and 3M were deleted from the lists because they either were acquired, were too diversified, or lacked publicly available data for this study.

Note: The results are essentially the same when the median is used instead of the mean for industry comparisons.

Kimberly-Clark and Boeing, beat it 66 percent and 69 percent of the time, respectively. However, over the long haul they all faltered. When we apply the managerial perspective of performance within industry, only four of these organizations were able to meet the 80-percent standard with respect to ROA: Johnson & Johnson (94 percent), Nucor (96 percent), Walt Disney (94 percent), and Wal-Mart (100 percent).

Proponents of the organizational physics argument have responded to these criticisms. They note, accurately, that even excellent or visionary or great companies are bound to stumble. The response is fair but misses the point. The issue is not whether the principles are right, but whether these firms truly belong in the club of the well managed. Merely asking consultants or other CEOs who the best companies are does not specify the criteria for inclusion, whereas measures of cumulative shareholder return suffer from the weaknesses noted earlier. As one set of critics claimed, "It is startling to us that some of the great companies would not have been classified as such if their performance results were tabulated starting a few months differently from the starting month selected."¹⁵

Investors are deeply concerned about today's shareholder value but also about how that value accumulates over time. But managers and management researchers want to know if the organization knows what it is doing, and shareholder returns, by themselves, tell them little about the robustness of an organization's strategy or capability. Thus we part ways with these authors when it comes to their proposition that these companies were well managed, sustained high performers and their methods should be emulated. When the measure of performance was cumulative shareholder return, the relationship, according to data developed by others as well as our own, was not supported.

Dynamic Capabilities Argument

The third explanation is best framed by the "dynamic capabilities" school.¹⁶ In contrast to the assumption of organization inertia in population ecology or a management formula in the organization physics perspective, this argument suggests that consistently high performers possess a capability to change their resources and processes repeatedly; they have the strategies, structures, resources, processes, and routines that allow them to both sense and adapt to environmental threats and opportunities as well as intentionally execute on strategic initiatives. These dynamic capabilities deliver appropriate organization changes when and where they are needed.¹⁷ Rather than adhere to a particular set of management practices expected to serve them well under any and

all circumstances, firms with healthy dynamic capabilities build (and drop) a variety of "normal" capabilities, possess organization structures that adjust, and so on. Sometimes they "stick to the knitting" and sometimes they diversify a little; sometimes they get really close to their customers and sometimes they distance themselves; sometimes they use "homegrown" management and sometimes they bring in outsiders; sometimes they use Level 5 leadership and sometimes a new direction will be dictated; and sometimes good enough is good enough.

Absent a dynamic capability that supports continuous change, organizations often adopt a "punctuated equilibrium" perspective on change.¹⁸ This model suggests that organization change and performance follow similar patterns. Over relatively long periods of time, organizations converge on a particular solution and organization design that yields high levels of performance. When the environment changes, the organization's existing offerings and operations become misaligned with the new demands. Performance drops, quickly or slowly, and eventually forces the organization into transformation-a relatively short period of discontinuous organization change. In response to these compelling opportunities or violent shifts, firms often adopt reactive change management practices that set new objectives and develop new practices intended to move the organization from its current state to a future one that will, it is hoped, be more aligned with environmental demands. Research and experience suggest that when these transformations are conducted quickly and effectively, often with the help of outside consultants, they ensure survival and set the organization on another steady path of low organization change. However, research also suggests that only one third of these transformations deliver their anticipated results.

In the face of continued marketplace shifts and new challenges to performance, leadership reluctantly realizes that they have to go through the whole process again. Weary, battered, and bruised from the prior effort, the organization finds itself facing transformation after transformation and ends up with "change fatigue." This seems to describe well what happened at DEC as they reorganized three times in three years before ultimately being acquired.

Firms with a strong set of dynamic capabilities would manifest a performance pattern consistent with our outperformers, whereas firms without dynamic capabilities and following a punctuated equilibrium approach to change would manifest a thrasher pattern—high levels of performance for a time followed by low levels of performance. The relative duration of high or low performance would depend on the organization's ability to conduct timely and effective transformations. In every industry we studied, there was at least one firm that was able to post consistently above-average performance over a thirty-plusyear period. Campbell's Soup in food and beverage; GlaxoSmithKline in pharmaceuticals; Johnson & Johnson in consumer products; Emerson Electric in electronics; Gap, Inc., in apparel; and Walgreens in drugstore retail have all posted consistently high levels of performance. Do these firms—many of which are not the ones we hear about in the business press—possess some unique capability that allows them to consistently outperform their peers?

In contrast, the thrashers—including BP, Procter & Gamble, IBM, Toyota, Pfizer, and Apple—are generally highly regarded companies that have received spectacular press at times but also tend to be admired for their peaks and forgiven for their valleys. They all have a pattern of breaking out of periods of underperformance, often through major transformations, only to fall back more than once over the thirty-year period. Each transformation was a high-risk, one-time occurrence that often started or ended with a CEO transition, technological change, or other key event. Although many business studies often support improved performance following well-executed transformations, there are no data regarding the sustainability of that performance. Instead, the organizations may have emerged exhausted rather than energized, complacent rather than paranoid. Critical changes and routines were not implemented well enough to affect performance, capabilities were not embedded, inertia was triumphant, and the cycle repeated.

CONCLUSION

Some large firms display a pattern of superior performance over long periods of time. A stable industrial environment does not explain these performance patterns. Since 1980, all industries have been subject to technological change, restructuring, regulatory change, and increasing global competition. These patterns are also not explained by the recommendations of "organizational physics." Example companies from *Built to Last, Good to Great*, and other studies are not consistent, long-term winners in their industries except by virtue of manipulated, investor-oriented, cumulative measures of performance.

Our data point to the conclusion that organizations with high levels of sustained performance have a capability to continuously adapt to their environments, see and exploit opportunities before others, and address threats quickly. This contrasts sharply with the change dynamic likely employed by the thrashers that launch transformations or other major change initiatives to temporarily achieve higher levels of performance, only to fall back in a few years. Such a capability would represent the important "something" that distinguishes outperformers from thrashers. The balance of our research aimed to understand and define that capability.

Superior performance is possible only when there is a high degree of fit between the requirements of the environment and the capabilities of the firm. In increasingly turbulent environments, this fit is temporary at best. *Agility* is the dynamic capability that allows outperforming firms to sense and respond to their environments and to rapidly reallocate resources, build new capabilities, and, perhaps most important, jettison the assets and activities that no longer create value. In a world where organizations are pressured to be predictable and reliable, these organizations have found a way to change and perform.

What we call the agility factor is an integrated set of routines that explains the difference between sustained high performance and boom/ bust cycles or sustained low performance. Agility is a dynamic capability that allows an organization to make timely, effective, and sustained responses to environmental change. It is more than "good management" and more than a single set of differentiating capabilities. Agility allows the organization to adapt, over and over again, in meaningful ways to support above-average performance over long periods of time.

CHAPTER ONE APPENDIX

Exhibits 1.8 through 1.12 display several different pictures of sustained performance. For demonstration purposes, these figures display one or two sustained performers and selected thrashers or chronic underperformers.

Exhibit 1.8 graphs the ROA data for the oil and gas industry. ExxonMobil outperforms the industry average for twenty-nine of the thirty years (97 percent) and Royal Dutch Shell posted above-average returns 95 percent of the time. ExxonMobil exceeded the standard despite significant and well-publicized environmental, safety, and international missteps. On the other hand, BP—which was also in the news over the period as an equity market darling, sustainability leader, and environmental criminal—exceeded the industry average only eight of the thirty years (27 percent). ConocoPhillips is a classic thrasher, outperforming the average 43 percent of the time and showing a steep performance drop from 2005 to 2008.

Exhibit 1.9 depicts ROA performance for the automotive industry. The underperformance of GM and Ford's all-too-brief moments of profitability are clearly visible; GM beat the industry average only seven of twenty-eight years before filing for bankruptcy protection in 2008. Ford beat the industry average in eight of the thirty years. Over the same period, Toyota, which received many business press column inches for its Toyota Production System, Toyota Management System, and market share objectives of "global 10" and "global 15" only beat the average in twenty-seven of the years (90 percent). Nissan and Audi display the thrasher pattern.

Exhibit 1.10 shows ROA performance for selected pharmaceutical companies. Partially reflecting all of the press awarded to Merck as a "good to great" company, it exceeded the industry average ROA 73 percent of the time. Bristol-Myers Squibb exceeded the average 80 percent of the time, and GlaxoSmithKline beat the standard 77 percent

of the time. Pfizer is a consistent underperformer that transformed into a thrasher around 1994, and Eli Lilly shows a similar pattern.

Exhibit 1.11 shows the ROA performance patterns for the retail apparel industry. Gap, Inc., despite its mercurial stock price performance, beats the industry average 83 percent of the time. Both Nike and Limited Brands consistently performed at or above the industry average 80 percent of the time. Although Nordstrom has a strong reputation, its profitability exceeded the industry average only 23 percent of the time. The industry thrashers, Levi Strauss and TJX Companies, have seen their profitability waver above and slightly below average for most of the period, achieving above-average performance 45 percent and 50 percent of the time, respectively.

Exhibit 1.12 presents the ROA performance of firms in the computer and office products industry. Xerox has consistently underperformed in the industry, while Dell and Lexmark have solid records of above-average performance. For all the attention they get, the thrashers in this industry are IBM and Apple, neither of which has been able to sustain above-average performance.

EXHIBIT 1.8. Oil and Gas Industry ROA Performance













